COMMONWEALTH of VIRGINIA

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September 19, 2016

Paula A. Hamel
Director, Generation Environmental Services
Dominion Resources Services, Inc.
5000 Dominion Boulevard
Glen Allen, VA 23060

RE: Dominion Possum Point
Pending Solid Waste Permit #617

Dear Ms. Hamel:

The Virginia Department of Environmental Quality (DEQ) has reviewed the revised application provided by Dominion in accordance with the applicable provisions of the Virginia Solid Waste Management Regulations (VSWMR) which incorporates the EPA 2015 Final Rule on the Disposal of Coal Combustion Residuals (EPA Rule).

Please address the following items:

1. Impoundment D is subject to the requirements of an existing surface impoundment under the EPA Rule. Therefore, please provide in a separate attachment the applicable descriptions and explanations required per 9 VAC 20-81-810.B. for Impoundment D. This attachment should outline the facility's plan to comply with the applicable sections of the EPA Rule during closure of Surface Impoundment D.

2. The area of Impoundment D is stated throughout the application, with multiple acreages identified. Please review the following instances and correct as necessary.
    - Section A.2. of the Closure Plan says Impoundment D is approximately 64 acres;
    - Table 1 (under Section B. of the Closure Plan) also states that Impoundment D is approximately 64 acres, with a total acreage of all five impoundments being approximately 120 acres;
    - Section D.1. of the Closure Plan says the cover system for Impoundment D "covers approximately 71 acres, which is the largest area ever requiring a final cover at any time during life of Surface Impoundment D;"

- The Design Plan drawings specify that the proposed limit of geosynthetic cap area is 70.39 acres.
- The background section of the Veneer Stability calculations (Appendix B) states that the Pond D has an approximate 61 acre geosynthetic cap area.
- The closure cost estimate for Impoundment D includes costs for 315,000 sy of each geosynthetic material (GDN, geomembrane, and cushion geotextile). This quantity converts to approximately 65 acres.
- The post-closure care cost estimate for cap maintenance is calculated for 64 acres.

Please clarify if there is a difference between the estimated area of CCR fill and the proposed limit of geosynthetic cap area. Note that the closure and post-closure cost estimates should comport with the total area of the installed final cover system.

Closure Plan

3. New Section C.1.1. addresses the requirement of 40 CFR 257.102(h) for closure by removal for Impoundments ABC and E; however, the sampling plan for the proposed demonstration wells will need to be adjusted. This is addressed in the Groundwater Monitoring Comment below (Comment #29). Please revise this section accordingly.

   Additionally, the section briefly describes the process of the removal of ash from ABC and E, but does not go into full detail until Section 8.4 of the Construction Quality Assurance (CQA) Plan. Please discuss the information in the closure plan or provide a reference to the section in the CQA Plan. In particular, there should be clarity regarding the step-wise process that will be undertaken including the removal verification process.

4. New Section C.1.2. indicates that the ancillary area that was found west of Surface Impoundment C was a laydown area. Please provide historical information or other data to support this claim. This section should also include more information on how the material is going to be removed, characterized, transported and disposed of in accordance with the regulations.

5. Section D.1. – Please also reference the use of a geosynthetic clay liner (GCL) to repair bottom liner that may be exposed and need repair during Pond D excavation and grading work as referenced in the CQA Plan. Technical specification 02598 shall be followed during GCL placement as bottom liner to ensure the GCL does not become saturated.

6. Appendix B – Veneer Stability Analyses: The revised submittal is missing the Appendix B title sheet for the Veneer Stability Analyses (should be inserted between PDF pages 314 and 315. Also, the third page of the veneer stability calculation worksheet (PDF page 317) has some overlapping equations, likely a result of the revisions made to the document.

7. Closure and Post-Closure Cost Estimates – See Comment 2 regarding a request for clarification of the acreage of Impoundment D and revise the closure and post-closure costs for Impoundment D accordingly.

Closure Plan Drawings

The revised application did not include any changes to the closure design drawings and instead referred to the original drawing submittal (stamped December 7, 2015). The original drawings were again reviewed for concurrence with the additional clarifying information submitted with the revised application. The DEQ has the following comments:

8. The DEQ also received a set of drawings for the Possum Point facility stamped February 8, 2016. These drawings appear to be a revised submittal of the December 7, 2015, drawings, with edits to address Prince William County Erosion and Sediment Control program requirements. Please confirm whether any drawing revisions shown on the February 8, 2016, drawing set need to be included on the drawing set submitted for the solid waste permit application.

9. Section 4.0 of the CQA Plan was revised to state that "GCL shall be placed beneath the geomembrane beneath all surface drainage channels within the limit of the geosynthetic cap system." Please provide a detail drawing showing this configuration or revise an existing detail drawing to include the GCL layer.

10. Anchor trench detail 4/50 should include the optional GCL that may be placed over damaged soil liner during final cover construction in areas identified on DWG 018 and 020.

11. Please provide a detail drawing of the geomembrane boot to be installed should well points or dewatering wells continue to be used for dewatering and/or water level monitoring after the final cover system construction. This potential scenario was outlined in Section 1.01.B. of Technical Specification 02150 for Construction Dewatering.

CQA Plan and Technical Specifications

12. Section 4.2 of the CQA Plan was revised to change the first instance of geotextile to GCL; however, there is still one reference to geotextile in the first paragraph, second sentence. Please revise to GCL.

13. Technical Specification 01450-This section should include references to the required and submitted Fugitive Dust Control Plan submitted pursuant to the 2015 EPA Final Rule.

14. Technical Specification 02200 - New section 3.08 addresses CCR Removal steps for Impoundments A, B, C, and E; however, the specification is missing procedures associated with the 6-inch hand-held soil probe at 1 probe/acre frequency included in Section 8.4 of the CQA Plan and Section C.1.1. of the Closure Plan.

15. Technical Specification 03600 – Section 2.03 Cuttings, states that drill cuttings will be either spread on the ground surface near the drill hole or transported to an on-site location designated by the Owner. The handling of drill cuttings should be handled as Investigatively Derived Waste (IDW) and handled in a manner consistent with existing DEQ guidance.

Attachment 6 Stormwater Calculations

16. Hydrologic and Hydraulic Calculation Booklet, Section 4.0 Run-On and Runoff Control Systems – An annotated version of the construction sequence is described for Ponds D and E and also ABC. The section should be updated to reflect the current plans to transport all excavated soils to Pond D and to have stored water pumped to Pond D so that it can be treated per the VPDES permit requirements prior to discharge.

Post-Closure Care Plan

17. Section 2.2 is missing a contact email address, which is a required plan element per 40 CFR 257.104(d)(ii).

Groundwater Monitoring Plan

18. Site Hydrology 2.2.4 –The Department will require the facility to submit a proposed Work Plan to study the extent/characteristics of "Stratum E" for Department review no later than 45-days prior to the onset of site work associated with the investigation. Please revise accordingly.

19. Proposed Monitoring System 2.3.1 – This table and accompanying Figure 5 should be updated to include those well identified in the Department's September 1, 2016 letter. The third paragraph of this section should also note that the top of the screened intervals for wells located within stratum 'D' should be set no shallower than at the known base of the CCR ponds such that the screened interval will lie entirely below the base of the monitored CCR surface impoundment.

20. Well Development 2.3.5 – Purge water related to well development should be handled as Investigatively Derived Waste (IDW) and handled in a manner consistent with existing DEQ guidance. The well development sections also states that all monitoring wells are tested for hydraulic characteristics (hydraulic conductivity), but there is no description of how the wells will be tested. Please describe how hydraulic conductivity will be evaluated and whether the testing will be done on a small scale (slug tests) or large scale (pump tests).

21. Table 1 – The Department recognizes that there has been a long history of monitoring well installation undertaken at the facility. As a result there is a great variety of differing well nomenclature in use. The Department requests the facility consider simplifying the well designations for the final permitted network. Use of the "B" prefix (which is commonly used to denote borings that are not turned into permanent MWs) should be replaced by the Pond 'ID' that the well is associated with. For example, MW's installed to monitor Pond D would be called D-xxxx while those associated with Pond E would be called E-xxxx etc. Simplifying well nomenclature in such a manner will make it easier to recognize GPS exceedances/monitoring results associated with the ponds being closed by CCR removal (A,B,C and E) versus results associated with the closure in place of pond D. Existing boring logs in Appendix B would need to be amended to show the original ID, and the revised permitted ID. For those MW's installed away from the edge of the surface impoundment which are not being used as point of compliance wells would be

defined under the Federal CCR rule and the VSWMR, but will instead be used as 'Sentinel' wells should be called S-xx. Any well installed on site as a nested well pair should use the (s) or (d) clarifier (e.g., D-xxxx(s) for the shallow screened sampling point). Because the numerical ID will not change (e.g., ED-9r would be renamed D-9r) historical results obtained under the VPDES permit will still be able to be linked to the monitoring program results going forward.

22. Table 3 – While Boron is currently listed as an EPA CCR App III sampling parameter in the Federal Regulation, it should also be shown on Table 3 of the GMP as the Department will require that Boron use a GPS during the monitoring program.

23. Detection Monitoring Program 3.1.2 – the Department is requiring all facilities in the Commonwealth that are subject to the groundwater monitoring requirements of the Federal CCR rule to initiate monitoring in the Modified Assessment program (with GPS established), rather than the Detection program. The GMP may contain a discussion of Detection monitoring requirements while noting monitoring will initiate within the modified Assessment program; or, it may simply state the facility will initiate monitoring in the Modified Assessment monitoring program and remove the Detection monitoring discussion.

24. Assessment Monitoring Program 3.1.3 – Because monitoring will initiate in Modified Assessment program, the Department will require GPS be set at the time of permit issuance.

25. Alternate Source Demonstration 3.1.4 – Section title should be 'Demonstrations' not 'Determinations'. A return Detection monitoring will not be allowed under the groundwater monitoring program established by Permit. In addition, the text must note that the ASD must be approved within 90-days not only submitted in 90-days.

26. Well Sampling Procedure 3.3.2.2 – Please correct the typo in the 3rd paragraph. "appropriate parameters" should read "sample bottles."

27. Field logbooks 3.4.4 – All field notebook data sheets and records of sampling and analysis must be retained (kept) for a timeframe that is consistent with that required under the Federal CCR rule and/or VSWMR.

28. Laboratory Analytical Procedures 3.4.6 – please remove the references to Alternate Concentration Limits (ACLs) in this section and anywhere else in the document. ACL's are not being used within the permitted groundwater monitoring program.

29. Techniques for Evaluating Groundwater Quality Data 3.7.1 –Groundwater monitoring will take place, at a minimum, for a time period allowing the collection of 10 independent samples from the compliance wells, and constituent trend analysis to be completed using this data. That trend analysis will form the basis for any proposed cessation of monitoring activities, or reduction in the number of wells that need to be monitored going forward. In those instances where GPS exceedances are identified in compliance wells at

former ponds A, B, C, or E, Corrective Actions as otherwise described in 9 VAC 20-81-260 shall be required and Corrective Actions will continue until no GPS exceedances have been recognized for a period of 3 consecutive years of monitoring. This comment also applies to Section C.1.1 – Surface Impoundments of the Closure Plan submittal package.

30. Groundwater Elevation Data Evaluation 3.8 – The facility should collect groundwater elevation from all accessible monitoring wells regardless of whether or not they will be sampled. This will provide a more thorough potentiometric map.

31. Verification sampling must be conducted within the timeframes allowed under 9 VAC 20-81-250.A. Sampling cannot wait until the next compliance sampling event.

32. Figure 4 –Based upon wells established in response to the Department's letter dated September 1, 2016, a revised potentiometric surface map should be included in the next revision of the GMP using data obtained from all monitoring wells.

33. Figure 5 – Because this figure deals with monitoring well locations, for graphic clarity showing the eagle nest buffer zones may not be required as long as these zones appear on other site maps included in the submission package.

34. Appendix C –Boron will be required to have a background based GPS and as a result the PQL should be significantly lowered such that a quantifiable background value can be obtained on site. Ensure all PQLs are appropriately established to detect and determine a quantifiable value for all established constituents.

Please provide the additional information and necessary revisions. Please note that this letter should not be considered a legal opinion or a case decision as defined by the Administrative Process Act, Code of Virginia § 2.2-4000 *et seq.* If there are any questions about this letter, please contact me at (804) 698-4185 or Justin.Williams@deq.virginia.gov.

Respectfully,

Justin L. Williams
Land Protection & Revitalization Division Director

cc: Richard Doucette, NRO Land Protection Program Manager
DEQ - PMT File, Permit No. 617